BUFFALO GOURD

Cucurbita foetidissima

Cucurbitaceae - Gourd

ECHO® PLANT INFORMATION SHEET

Origin

The buffalo gourd is native to Southwestern North America

Uses

The seeds, roots, young fruits, and flowers are all edible. The crushed seeds yield a polyunsaturated oil, and the pulp is fed to cattle. On barren, arid land it may match the performance of traditional protein and oil sources such as peanuts and sunflower, both of which require more water. North American Indians used the seed for food and soapy extracts of the fruit pulp and vine for washing clothes and cleaning hides. (This was surely not for a fresh scented soap; the vine has a foul smell!) Some communities in Mexico are now using the buffalo gourd root as a fuel; they say the smoke is not irritating.

Drs. Wayne Bragg, Eugene Schultz, and Debra Duke found that they can harvest more biomass from the roots (11 metric tons per hectare in 3 months) than from limbs of the common dryland firewood tree crop, mesquite (6 metric tons per hectare in 12 months). Roots are cut into thin segments, with some thin slivers, and sun dried. Roots are slower to ignite than wood, which is where the slivers help. Frequent feeding with small charges of roots is desirable. Size of the grate openings may need to be increased, as the root fuel requires more draft than wood. With enough air they produce no more smoke than wood, but do produce more ash.

Common Names

- Spanish
 - o Calabacilla
 - o Ayote

Cultivation

Buffalo gourd does not grow in hot humid weather (like that found in Florida). It is a vigorous perennial that grows wild on wastelands in Mexico and the southwestern United States.

Harvesting and Seed Production

The fruits, 8 cm (3 in) in diameter, are allowed to dry out and then can be "threshed." One hectare can produce 2.5 tons of seeds. You should harvest most roots about 3 months after planting when roots about the size of a large carrot. When left too long, the roots are too difficult to dig and the "mother plant" soaks up all available water. Leave a few plants because wherever a bit of soil and water is placed over the sprawling vine, roots will develop. In this way a continuing colony is sustained, which can be selectively harvested as needed.

Cooking and Nutrition

The seeds of the buffalo gourd contain 30-35% protein and up to 34% oil. The seeds are roasted and eaten, ground into a meal, or pressed for their edible oil. Roots are used as a source of starch. Young fruits are sometimes eaten or dried for future use. The flowers are also edible.

References

Plants for a Future

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